

### ABSTRACT

The present invention is directed to bispecific antigen-binding protein. These bispecific antigen-binding proteins are optimized in their avidity for antigen(s) but maintain their ability to function as a natural antibody, including the ability to activate complement mediated cytotoxicity and antibody dependent cellular toxicity. Natural IgG immunoglobulins are monospecific and bivalent, having two binding domains which are specific for the same epitope. By contrast, an IgG type immunoglobulin of the invention is bispecific and bivalent, having a binding domain on each light chain specific for one epitope and a binding domain on each heavy chain specific for a second epitope. The design of the present antigen-binding proteins provides for efficient production such that substantially all of the antigen-binding proteins produced are assembled in the desired configuration.